



UNITED STATES PATENT AND TRADEMARK OFFICE

ck
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/926,805

04/08/2002

Ravinder K. Jain

44838

1656

23529

7590

07/25/2006

ADE & COMPANY INC.

P.O. BOX 28006 1795 HENDERSON HIGHWAY

WINNIPEG, MB R2G1P0

CANADA

EXAMINER

MCELWAIN, ELIZABETH F

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,805

Applicant(s)

JAIN ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006 and 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,12,17,46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,12,17,46 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on February 13, 2006, March 7, 2006 and May 30, 2006 have been entered.

Claims 1-5, 12, 17 and 46-47 are pending and are examined on the merits.

Please note that claims 46 and 47 have been incorrectly labeled as “new” claims, while the status identifier

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

2. Claims 1 and 17, and claims 2-5, 12, 46 and 47 dependent thereon are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of “growing the organism under conditions such that said glycerol-3-phosphate acyltransferase is expressed prior to harvesting” is not supported by the specification as originally filed.

Claim Rejections - 35 USC § 103

1. Claims 1, 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizawa.

Nishizawa (column 11-13) teaches transforming a plant with a DNA encoding a protein having GPAT activity and having at least 70% identity to SEQ ID NO: 7 and expressing the activity in the plant leaf prior to harvesting, wherein an increase in triacylglyceride content would be inherent in the same process.

Nishizawa et al do not specifically teach harvesting the triacylglycerides from the seeds.

Given the recognition of those of ordinary skill in the art of the value of transforming a plant with a GPAT coding sequence, it would have been obvious to one of ordinary skill in the art to use the method taught by Nishizawa and to modify it by extracting the fatty acids from the seeds given that the seeds are the storage organ for fatty acids in plants. Thus the claimed invention would have been prima facie obvious as a whole at the time the invention was made, especially in the absence of evidence to the contrary.

2. Claims 1-5, 12, 17 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizawa, and further in view of Davies et al (U.S. Patent 5,563,058) and Bhella et al (Plant Physiol. 106:1713-1714,1994 in IDS), as stated in the last office action. In addition, Nishizawa teaches extraction of total lipids from the transgenic plant, wherein GPAT is expressed prior to harvesting, and it would have been obvious to extract the fatty acids from the

Art Unit: 1638

seeds, which are the storage organ for fatty acids in plants, as stated above, and inherently would comprise triacylglycerides (columns 13-14).

Applicants' arguments filed February 13, 2006, March 7, 2006 and May 30, 2006 have been fully considered but they are not persuasive. Applicants assert that the amendment of the claims should overcome the rejection and given that Nishizawa found no significant difference in the fatty acid composition of major lipid classes.

The Examiner maintains that Applicants' claims recite the same method steps as those taught in the prior art, and that while Nishizawa did not identify an increase in triacylglycerides in the leaves of the plants, that using the same methods the increase would be inherent in the seeds and it would have been obvious to extract the lipids from the seeds. Furthermore, the evidence for non-obviousness should be commensurate with the scope of the claims.

Conclusion

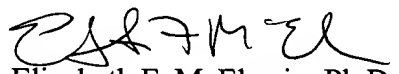
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1638

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Elizabeth F. McElwain, Ph.D.
Primary Examiner
Art Unit 1638

EFM